

We claim:

1. A method for managing traffic on a switching system comprising:
  - determining a level of system traffic across a system;
  - correlating the determined traffic level with a predetermined
  - 5 level of available service functionality; and
  - establishing an available services list.
2. The method of claim 1, further comprising:
  - receiving a service request from a requesting end point;
  - determining whether the service request is one of the available
  - 10 services on said available services list;
  - generating a service availability message for the requested
  - service; and
  - transmitting the service availability message to the requesting
  - end point.
- 15 3. The method of claim 1, wherein the system traffic determination is periodic.
4. The method of claim 1, wherein the system traffic determination is executed by a central server.
5. The method of claim 2, wherein the system traffic determination is
- 20 initiated upon receipt of the service request.
6. The method of claim 1, further comprising creating a correlation table comprising data fields including an upper traffic level limit and a lower traffic level limit and a list of services provided to an endpoint when the determined traffic level falls within the upper and lower traffic limits.

7. The method of claim 6, wherein the correlation table provides weighted services availability.

8. The method of claim 6, wherein the correlation table includes weighted services that are distributed according to a service class determined by the  
5 amount of bandwidth necessary to implement a service.

9. The method of claim 8, wherein the service class includes voice-based communication services.

10. The method of claim 8, wherein the service class includes video-based communication services.

10 11. The method of claim 2, wherein the service availability message notifies the end point that the requested service is available based on the traffic level determination.

12. The method of claim 2, wherein the service availability message notifies the endpoint that the requested service is unavailable based on the traffic level  
15 determination.

13. The method of claim 12, wherein when the service is unavailable, the end point informs a user that the requested service is temporarily unavailable.

14. The method of claim 12, wherein when the service is unavailable, a central server creates an entry on a negative request queue corresponding to the  
20 service request.

15. The method of claim 14, wherein the entry on the negative request queue includes a field identifying the service requesting endpoint.

16. The method of claim 14, wherein the entry on the negative request queue includes a field indicating the type of service requested.

17. The method of claim 14, further comprising transmitting a status update message from the central server to the end point when the requested service becomes available.

18. The method of claim 14, further comprising forwarding the service request to a second end point when the requested service becomes available.

19. The method of claim 2, further comprising the requesting end point establishing a connection through the switching system to provide a user with the service requested.

20. A method for conducting traffic management on a network comprising:

creating a list of available system services;

updating the list of available system services based on a network traffic measurement and network performance parameters associated with system services; and

selectively suppressing network device service requests based on whether a requested service corresponds to an entry on the list of available system services.

21. The method of claim 20, wherein a user end point transmits the network device service request.

22. The method of claim 20, wherein a end point receives a service availability message indicating whether the requested service will be provided.

23. The method of claim 22, wherein when the end point receives a service availability message indicating the requested service will not be provided, the end point receives a second message when the requested service becomes available.

24. The method of claim 20, wherein the network performance parameters include a list of system defined services and associated bandwidth capacity levels.

25. An apparatus for managing traffic on a switching system  
5 comprising:  
a traffic determining means for determining a level of system traffic across a system;  
a correlation means for correlating the determined traffic level with a predetermined level of available service functionality; and  
10 an establishing means for establishing an available services list.

26. The apparatus of claim 25, further comprising:  
a receiving means for receiving a service request from a requesting end point;  
a available services determining means for determining  
15 whether the service request is one of the available services on said available services list;  
a generating means for generating a service availability message for the requested service.

27. The apparatus of claim 26, further comprising:  
20 a transmitting means for transmitting the service availability message to the requesting end point.

28. The apparatus of claim 27, wherein the service availability message notifies the end point that the requested service is unavailable;  
a central server creates an entry on a negative request queue  
25 corresponding to the service request; and

the central server notifies the end point when the requested service becomes available.

29. An apparatus for conducting traffic management on a network comprising:

5 a creating means for creating a list of available system services;

an updating means for updating the list of available system services based on a network traffic measurement and network performance parameters associated with system services; and

10 a suppressing means for selectively suppressing network device service requests based on whether the requested service corresponds to an entry on the list of available system services.

30. The apparatus of claim 29, further comprising:

a transmitting means for transmitting first message to a requesting network device that the requested service should be suppressed; and

15 said transmitting means subsequently transmits a second message to the network device when the requested service becomes available.